DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. Sy-Patton-, Director

State: LOUISIANA

DESCRIPTIVE REPORT

Topographic Hydrographic

Sheet No. 5

5361

LOCALITY

Gulf Coast

Mermentau River

19_33

CHIEF OF PARTY W. E. Parker

U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES

JAN 12 1934



DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No5
REGISTER NO. 5361
State Louisiana
General locality Gulf Coast
Locality Mermentau River
Scale 1:20,000 Date of survey July 13 - 19 3
Vessel Starboard Launch of HYDROGRAPHER
Chief of Party W. E. Parker
Surveyed by George R. Shelton and E. L. Jones
Protracted by D. H. Bassett
Soundings penciled byD. H. Bassett
Soundings in fathems feet
Plane of reference MaLaWa
Subdivision of wire dragged areas by
Inked by A.M.Uzefovich
Verified by A.M.U. and H.W.Murray
Instructions dated
Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1931

5361

Descriptive Report to Accompany
Hydrographic Sheet No. 5, Mermentau River, Louisiana.

INSTRUCTIONS: - December 17, 1932. Project HT - 123.

SURVEY METHODS: - Survey was made by a detached launch party in charge of Lieutenant (j.g.) George R. Shelton based at Grand Chenier, Louisiana. Soundings were by hand lead and controlled by three point fixes on structures and flags located by plane table, which was controlled by triangulation executed by Lieutenant L.C. Wilder and Lieutenant (j.g.) E. R. McCarthy in the winter of 1932-3

Soundings were reduces as follows: A standard automatic tide gauge was maintained at the Calcasieu Lighthouse wharf. A portable automatic tide gauge was set up near the mouth of the river and maintained throughout the survey. Simultaneous comparisons were made between this gauge and the gauge at Calcasieu Lighthouse Wharf. Two other gauges were set up during the Survey, one near the east end of Lower Mud Lake, the other one mile east of Grand Chenier. Simultanious comparisons were made between these gauges and the gauge at the mouth of the river. The river was divided into three zones: The first zone extends from the bar to the west end of Lower Mud Lake; The second zone from the west end of Lower Mud Lake; The third zone from Grand Chenier to the eastern limit of the Survey. The reducers were obtained from the records of the gauges in their respective zones.

DISCREPANCIES: - No discrepancies of importance have been detected.on the sheet.

No depth curves have been drawn for fear of obscuring the soundings. ~

The river is as adequately developed as the scale of the sheet would permit. A scale of 1:20,000 was called for in the Instructions but it is apparent that a scale of 1:10,000 should have been used.

CHANNEL AND DANGERS: The controlling depth across the bar is 31 feet as which company is a feet no. 1278. The controlling depth across Lower Mud Lake is 2 feet, four feet less than shown on the chart. The controlling depth from the east end of Lower Mud Lake to eastern limit of Survey is 5 feet. The five foot spot is in mid channel, 130 meters SSW of the S end of a small island in Upper Mud Lake. The chart shows 15 feet at this spot.

NAVAGATION: - The river is of no commercial value west of Grand Chenier. Small shallow draft boats ply between Lake Charles, La. and Grand Chenier, La. Only small open boats ever use the river from Grand Chenier to its mouth.

Jerge R. Shellow Jr. H. O E.

STATISTICS FOR SHEET No. 5

Vol. No.	Posit ions	Soundings	Miles (stat.)	Sq. Stat Miles
11	287	1832	50.0	
2	161	1052	28.0	
Totals	449	2884	78 . 0	2.0

March 7, 1934

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in 2 volumes of sounding records for

HYDROGEAPHIC SHELT 5361

Locality Mermentau River, Louisiana

Chief of Party: W. E. Parker in 1933

Plane of reference is mean low water, reading

- 1.9 ft. on tide staff at AUTO
- 3.6 ft. below B. M. 1
- 3.2 Ft. on tide staff at MAT
- 5.7 ft. below B. M. 1
- 2.9 ft. on tide staff at COT
- 2.4 ft. below B.M. 1

Height of mean high water above plane of reference is 1.6 ft. at AUTO;

0.7 ft. at MAT and 0.4 ft. at COT

Condition of records satisfactory except as noted below:

Acting Chief, Division of Tides and Currents

HYDROGRAPHIC SHEET No. 536!.

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	449
Number of positions checked	••••
Number of positions revised	• • • • •
Number of soundings recorded	2884
Number of soundings revised	20
Number of signals erroneously	
plotted or transferred	

Date: March.4/,.	1934	• • • • •	• • • • •	• • • • • •	 • • • •	• • • • • •	• • • •
Cartographer: . A	. M. Uz	efovic	h	• • • • • •	 • • • • •	:	• • • • •

Section of Field Records Report on H-5361

Chief of Party W.E. Parker Protracted by D.H.Bassett Verified and inked by A.M. Uzefovich Surveyed in 1933
Surveyed by G.R.Shelton and E.L.Jones
Soundings plotted by D.H.Bassett

- 1. The records conform to the requirements of the General Instructions.
- 2. The field plotting was completed to the extent prescribed in General Instructions.
- 3. The hydrography is complete, and the usual depth curves can be drawn.
- 4. The office cartographer did not have to do over any part of the drafting done by the field party, except the plotting of two rows of pilings at Upper Mud Lake, according to the Topo. 4794. Also docks, old dam (at Lower Mud Lake), and ferry (@ Pole- @ Fe) were plotted from the Topo. 4794.
- 5. The junction with adjacent sheet H-1645 (surveyed in 1885) was not made.
- 6. Remarks: The Low Water Line was inked only on western part of the sheet H-5361, according to the Topo. 4791. The Low Water Line at Lower Mud Lake was not inked, as there is no Low Water Line on the Topo. 4794. (Probably transferred from Boat Sheet which has not been received in the office)

 The first piling, and sounding "6" (see: Vol.2, p.22, 10g-11g) was inked on H-5361 by field party and the location of this piling is different in comparison with Topo. 4794. Both retained.

 Vol. 2, p.p. 10,13,15 mentioned docks. These docks are not shown on the Topo. 4794, but have been plotted on H-5361 from the 2dg. Rec.

 The office cartographer did not have at his disposal the Boat Sheet.
- 7. The quality of the work is fair.

Respectfully submitted
alexis M. Weforich

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5361 (1933).

Mermentau River, Gulf Coast, Louisiana. Instructions dated December 17, 1932 (HYDROGRAPHER) Surveyed July 13-19, 1933.

Hand Lead Soundings - 3-Point Control on Shore Signals.

Chief of Party - W. E. Parker.

Surveyed by - G. R. Shelton and E. L. Jones.

Protracted and soundings penciled by - D. H. Bassett.

Verified and inked by - H. W. Murray and A. M. Uzefovich.

1. Condition of Records.

The records are neat, legible and conform to the requirements of the Hydrographic Manual except as follows:

a. No boat sheet was submitted.

Bost Sheet received in office . H.W.M. 2/12/35.

- b. No list of signals used was attached to the first sounding volume (par. 139 of H. M.).
- c. Topographic features outside the low water line were not transferred to the smooth sheet.
- d. Several offshore signals were shown without the correct topographic feature. These were corrected in the office in accordance with available information.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

3. Sounding Line Crossings.

Cross lines were not practicable.

4. Depth Curves.

The 6 and 12-foot curves may be satisfactorily drawn within the limits and scale (1:20,000) of the sheet.

5. Junction with Contemporary Surveys.

The junction on the south at the entrance to the river with H. 5418 (1933) is satisfactory and has been considered in the review of that survey.

The northern limits of this project as prescribed in Par. 7 of the Instructions for the Project is lat. 29048.2, long. 92052.5, which coincides with the limit of Chart No. 1278.

6. Comparison with Prior Surveys.

a. H. 1647 (1885).

This survey made in the vicinity of the entrance to Mermentau River is small in area, extends about 1½ miles upstream and is the only Coast and Geodetic survey previously made in this river. Comparison of soundings with H. 5361 (1933) shows considerable change here.

7. Comparison with Chart 1278.

Soundings shown on the latest edition of the chart originates with the U. S. Engineers Survey of 1913 (B.P. 15413). This survey is on a scale of 1:36,000 and shows only selected soundings in the main channel. In the shoal areas in Upper Mud Lake and Lower Mud Lake white costs are shown where the present survey (H. 5361 - 1933) contains but general notes as to the approximate depths existing. The new survey should supersede the engineer's survey wherever the present survey shows actual depths. In the two lakes mentioned the engineer's survey can be used to supplement the work on H. 5361 (1933) for charting purposes.

8. Field Plotting.

The field protracting and plotting were accurate and conform to the requirements of the Hydrographic Manual.

9. Additional Field Work Recommended.

This survey is complete, no additional field work is required.

10. Superseding Old Surveys.

Within the area covered, the present survey supersedes the following survey for charting purposes:

H. 1647 (1885) In part.

11. Note to Compiler.

Several small docks not shown on topographic sheet T. 4794 have been added to the hydrographic sheet from the sounding records.

12. Reviewed by - H. W. Murray, July 30, 1934.

Inspected by - A. L. Shalowitz.

K.T. Adams

Examined and approved:

K. T. Adams.

Chief, Section of Field Records.

Chief, Division of Charts.

Chief, Section of Field Work.

Chief, Division of H. & T.

ude

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

1. 1.

EXPRESS ADDRESS:

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY Ship "HYDROGRAPHER", Port Arthur, Texas.

September 4, 1934

The Director,

Coast and Geodetic Survey,

Washington, D. C.

FROM:

Commanding Officer,

U. S. Coast and Geodetic Survey,

Ship "HYDROGRAPHER".

SUBJECT: Hydrographic Survey No. 5361, Mermentau River, Leuisiana.

REFERENCE: 80-DRM.

According to our records the Boat Sheet for Hydrographic Survey No. 5361, field No. 5, was mailed to the Office August 3, 1934, and received in the Office August 9, 1934. The sheet therefore must be in Office files.

Regarding signal ("Pap") shown on Topographic Sheet No. 4791, we have no information aboard the ship. If you will return the Boat Sheet or a tracing of the Mouth of Mermentau River it is possible that some information can be given regarding the signal in question.

> Due . 17,1934 Filed wich DR. AT-4791.

2/12/35

Raymond P. Eyman, Lt. Commander,

Coast and Geodetic Survey,

Commanding "HYDROGRAPHER".

80-DRM

August 18, 1934.

To: Commanding Officer, U. S. Coast and Geodetic Survey, Ship HYDROGRAPHER, Fort Arthur, Texas.

From: The Director,

U. S. Coast and Geodetic Survey.

Subject: Hydrographic survey No. 5361, Mermentau River, Louisiana.

Hydrographic survey No. 5361, field number 5, which was executed by your party in July 1935, has just been reviewed in this office. This is the survey of Mermentau River, Louisiana and was surveyed under the immediate direction of Lieutenant (j.g.) George R. Shelton.

To date the boat sheet of this survey has not been received in this office. Please try to locate this and forward it at your earliest convenience.

There are several features in question which can not be definitely disposed of until the boat sheet is received. One of these is the penciled delineation of the low unter line at several places in the river and in Lower Mud Lake. This pencil line appears on the smooth hydrographic sheet and has evidently been transferred from the boat sheet. It will not be inked until the boat sheet has been received.

Information is also requested as to the nature of signal "Pap" which is shown on topographic survey No. 4791 and when transferred to this hydrographic sheet is located at about the middle of the entrance chemnel to the river, in latitude 29° 45.4°, longitude 93° 06.8°. This signal was shown on neither the smooth sheet under consideration nor on topographic survey No. 4794 which is the survey of the river. Topographic sheet No. 4791 is a survey of the outer coast.

It will be appreciated if you will write this office at your earliest convenience regarding these matters in question.

(Bigned) J. P. HAWLEY

Copy to Capt. W.E.Parker, 23 Baltimore St., Kensington, Md. Acting Director.